NWS FORM E-5 (11-88)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	HYDROLOGIC SERVICE AREA (HSA)
(PRES. BY WSOM E-41)	NATIONAL WEATHER SERVICE	WFO Jackson, Mississippi
MONTHLY RI	EPORT OF RIVER AND FLOOD CONDITIONS	REPORT FOR: MONTH YEAR October 2001
1	Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service	SIGNATURE  Jim Stefkovich, MIC  In Charge of HSA
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When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41)

We had several weather systems push through the HSA during the month of October.

A frontal system pushed through the area on Friday October 5<sup>th</sup> giving us .50 to 2.50 inches of rain. The heaviest rain was over the Lower Yazoo River where 2.67 inches fell at Valley Hill, MS.

A strong frontal system, warm moist air and a series of upper air disturbances pushed across the area from early Thursday October 11<sup>th</sup> to late Saturday October 13<sup>th</sup>. Heavy rainfall fell over southeast AR, the lower Yazoo, Big Black, Upper Pearl, southern portions of the Lower Pearl, and portions of the Upper & Middle Pascagoula River System. Some 4 day rainfall totals: Arkansas City, AR 7.43"; Lomardy, MS; 7.32"; Raleigh, MS 7.13"; Hattiesburg, MS 6.74"; Waldrup, MS 6.58"; Dermott, AR 6.50"; Forest, MS 6.35; Kosciusko 13SSE, MS 5.50"; Oakgrove, LA 4.77".

A fast moving frontal system pushed through the area Wednesday October  $24^{\rm th}$  bringing with it rainfall amounts less than .50 inches to most areas.

Prior to the mid October rain event, soils were allowed to dry out from the high soil moisture conditions which prevailed in early September. Considering the high rainfall totals which fell, only several rivers went above flood stage due to this mid October rainfall event. Five to six inches of rainfall fell over the Upper Big Black River basin causing only minor flooding. Four to six inches fell over upper portions of Tuscolameta Creek in the Upper Pearl River basin also causing only minor flooding. Six to seven inches of rain fell over northern Sunflower and southern Coahoma Counties causing the Big Sunflower to experience minor flooding. The remaining rivers in the HSA experienced minor to moderate rises.

The heavy rainfall event in the middle of the month produced well above normal rainfall totals for the month over most areas of the HSA:

RIVER BASIN	RAINFALL	DEPARTURE FROM NORMS

Southeast Arkansas (Chicot & Ashley counties)	5.00 to 8.50 inches	Much above normal	
northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)	4.50 to 7.50 inches	Slightly above to much above normal	
Lower Yazoo	3.50 to 7.50 inches	Normal to much above normal	
Big Black	3.50 to 7.50 inches	Normal to much above normal	
Homochitto/ Bayou Pierre	4.50 inches	Slightly above normal	
Pearl (abv Jackson)	3.50 to 6.00 inches	Normal to much above normal	
Pearl (Blo Jackson)	2.75 to 6.75 inches	Slightly below normal to normal except above normal in southeastern portions of the basin	
Pascagoula	5.50 to 8.00 inches	Much above normal	

The heaviest rainfall amounts in the HSA for the month were 8.82 inches near Arkansas City, AR; 8.55 inches at Ackerman, MS; 8.10 inches at Forest, MS; 7.89 inches at Raleigh; 7.87 inches at Tallulah, LA; 7.50 at Dermott, AR; and 7.29 at Laurel, MS.

Here at the WFO, the monthly rainfall was 3.41 inches, which was 0.15 inches above normal. Our total for the calendar year ending October  $31^{st}$  stands at 53.69 inches, which is 9.04 inches above normal.

The Mississippi River remained below seasonal norms during the first half of the month; however, the during the second half of the month, river stages were higher than the seasonal norms. The provisional high and low stages for October are listed below:

Location	High Stage(ft)	Date	Low Stage(ft)	Date
Arkansas City, AR	12.13	10/31	-0.85	10/11
Greenville, MS	23.54	10/31	10.71	10/11
Vicksburg, MS	16.02	10/31	3.50	10/12
Natchez, MS	22.37	10/28	10.45	10/12

Flood Warnings (FLW'S) issued: 6
Flood Statements (FLS'S) issued: 38
Daily Rainfall Reports (RRA'S) issued 31
Daily River Forecasts (RVS'S) issued 31
Daily River Stages (RVA'S) issued 31

Marty V. Pope Service Hydrologist

cc: USGS Little Rock District

USGS Ruston District

USCE Mobile District

USCE Vicksburg District

USCE Mississippi Valley Division

USGS Mississippi District

SRH Climate, Weather and Water Division

**LMRFC** 

Pearl River Valley Water Supply District

Hydrologic Information Center

Southern Region Climate Center